

WHAT IS CLAIMED IS:

Sub C1  
1. A method for inhibiting cancer cell growth or killing cancer cells comprising eliciting an immune response with an immunologically effective amount of a composition comprising a phosphatidylserine/ polypeptide conjugate.

2. The method of claim 1, wherein said cancer cell is a lymphoid, renal or bladder cancer cell.

3. The method of claim 1, wherein said cancer cell is comprised within an animal.

4. The method of claim 3, wherein said animal is a human.

5. The method of claim 1, wherein said composition further comprises a pharmaceutical excipient.

6. The method of claim 5, wherein said composition is administered to said human ~~topically~~, parenterally, orally, subcutaneously, or by direct injection into a tissue site.

7. ~~The method of claim 1, wherein said polypeptide is selected from the group consisting of BSA, KLH, BGG, diphtheria toxin, and  $\beta_2$ -glycoprotein I.~~

8. The method of claim 7, wherein said polypeptide is  $\beta_2$ -glycoprotein I.

9. ~~A method for treating cancer comprising eliciting an immune response with an immunologically effective amount of a composition comprising a phosphatidylserine/ polypeptide conjugate.~~

10. A method for treating cancer comprising contacting a subject with a lipid or lipid/polypeptide conjugate effective to treat said cancer.

11. ~~The method of claim 8, wherein said lipid is phosphatidylcholine or phosphatidylserine.~~

12. A method of generating an immune response, comprising administering to an animal a pharmaceutical composition comprising an immunologically effective amount of a phosphatidylcholine/polypeptide or a phosphatidylserine/polypeptide conjugate composition.

13. A method of making an antibody that specifically binds to phosphatidylserine, a phosphatidylcholine/polypeptide conjugate or a phosphatidylserine/polypeptide conjugate, said method comprising administering to an animal a pharmaceutical composition comprising an immunologically effective amount of a phosphatidylcholine/polypeptide or a phosphatidylserine/polypeptide conjugate composition.

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14. The method of claim 13, wherein a composition comprising phosphatidylserine/BSA, phosphatidylserine/KLH, phosphatidylserine/BGG, or phosphatidylserine/ $\beta_2$ -glycoprotein I conjugate is administered to the animal.

15. An antibody that specifically binds to phosphatidylserine a phosphatidylcholine/polypeptide conjugate or a phosphatidylserine/polypeptide conjugate, said antibody made by a process comprising administering to an animal a pharmaceutical composition comprising an immunologically effective amount of a phosphatidylcholine/polypeptide or a phosphatidylserine/polypeptide conjugate composition.

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16. The antibody of claim 15, wherein a composition comprising phosphatidylserine/BSA, phosphatidylserine/KLH, phosphatidylserine/BGG, or phosphatidylserine/ $\beta_2$ -glycoprotein I conjugate is administered to the animal

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17. The antibody of claim 16, wherein said polypeptide is  $\beta_2$ -glycoprotein I.

18. The antibody of claim 15, wherein the antibody is linked to a detectable label.

5 19. The antibody of claim 18, wherein the antibody is linked to a radioactive label, a fluorogenic label, a nuclear magnetic spin resonance label, biotin or an enzyme that generates a detectable product upon contact with a chromogenic substrate.

20. The antibody of claim 18, wherein the antibody is linked to an alkaline phosphatase, hydrogen peroxidase or glucose oxidase enzyme.

21. The antibody of claim 15, wherein the antibody is a monoclonal antibody.

22. A method for detecting a phosphatidylserine, phosphatidylcholine/polypeptide or a  
15 phosphatidylserine/polypeptide conjugate in a biological sample, comprising the steps of:

(a) obtaining a biological sample suspected of containing a phosphatidylcholine/polypeptide or a phosphatidylserine/polypeptide conjugate;

(b) contacting said sample with a first antibody that binds to a phosphatidylcholine/polypeptide or a phosphatidylserine/polypeptide conjugate, under conditions effective to allow the formation of immune complexes; and

(c) detecting the immune complexes so formed.

23. An immunodetection kit comprising, in suitable container means, an antibody that specifically binds to phosphatidylserine or to a phosphatidylserine/polypeptide conjugate, and  
30 an immunodetection reagent.

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24. The immunodetection kit of claim 23, wherein the immunodetection reagent is a detectable label that is linked to said conjugate or said antibody.
- 5 25. The immunodetection kit of claim 23, wherein the immunodetection reagent is a detectable label that is linked to a second antibody that has binding affinity for said conjugate or said first antibody.
- 10 26. A method for treating cancer in an animal comprising generating in said animal an immune response to a composition comprising a phosphatidylserine or phosphatidylserine/polypeptide conjugate effective to treat said cancer.
- 15 27. The method of claim 26, wherein the composition comprises a phosphatidylserine/polypeptide conjugate comprising a polypeptide selected from the group consisting of BSA, KLH, BGG, diphtheria toxin, and  $\beta_2$ -glycoprotein I.

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